

**CONSUMING & EXPENDING
ENERGY**

**WEIGHT CONTROL &
EATING DISORDERS**



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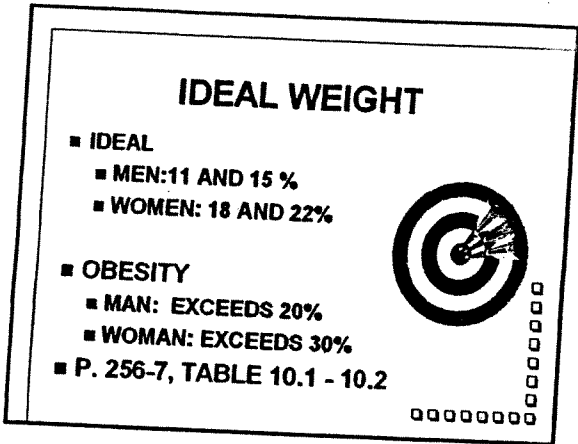
IDEAL WEIGHT

- IDEAL
 - MEN: 11 AND 15 %
 - WOMEN: 18 AND 22%
- OBESITY
 - MAN: EXCEEDS 20%
 - WOMAN: EXCEEDS 30%

■ P. 256-7, TABLE 10.1 - 10.2



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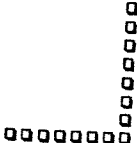
TECHNIQUES FOR ASSESSING

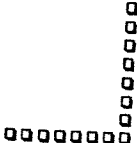
- HYDROSTATIC WEIGHING: MOST ACCURATE
- PINCH AND SKINFOLD TESTS
- BODY MASS INDEX (BMI) (AGES 20-29)
 - DIVIDE YOUR WEIGHT IN KILOGRAMS BY THE SQUARE OF YOUR HEIGHT IN METERS
 - $BMI = \frac{WT.(KG)}{[HT.(CM)]^2}$ (DIV. HT. IN INCHES BY 39.4, THEN SQUARE THE RESULT)
 - FEMALES DESIRABLE = 21 TO 23
 - MALES DESIRABLE = 22 TO 24
 - BMI ABOVE 27.8 FOR MEN & 27.3 FOR WOMEN = INCREASED HEALTH RISKS

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WEIGHT CONTROL QUESTIONS

- DO WE EAT TOO MUCH OR EXERCISE TOO LITTLE?
- WHY DO FEWER THAN 5% OF ALL PEOPLE ACHIEVE PERMANENT SUCCESS ON A WEIGHT LOSS PROGRAM?



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HEREDITY

- * GENETICALLY INHERITED BODY TYPES
 - * ECTOMORPHS : TALL, SLENDER
 - * ENDOMORPHS: ROUND, SOFT
 - * MESOMORPHS : MUSCULAR
- * GENETICS
 - * TWINS RAISED APART THAT HAD OBESE PARENTS BECAME OBESE
- * LIFESTYLE OR GENETICS
 - * DIET & EXERCISE CAN MODIFY GENETIC EFFECTS

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FOOD INTAKE & METABOLISM

- **BROWN FAT CELLS**
 - SPECIALIZED FAT CELLS THAT AFFECT ABILITY TO REGULATE FAT METABOLISM
- MAY EAT FOR REASONS OTHER THAN HUNGER
- SATIETY: FULLNESS AFTER EATING
 - VARIES DEPENDING ON CONDITIONING
- HUNGER
 - RESPONSE TO NUTRITIONAL NEEDS
- APPETITE
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DEVELOPMENTAL FACTORS

- HYPERPLASIA
 - EXCESSIVE # OF FAT CELLS
- HYPERTROPHY
 - ABILITY OF FAT CELLS TO SWELL
- SET POINT THEORY
 - BODY ACTS TO MAINTAIN BODY FAT
- BASAL METABOLIC RATE
 - ENERGY BODY USES AT COMPLETE REST
 - 60-70% OF ALL CONSUMED CALORIES
 - SLOWS 1-2% PER YEAR AFTER 30
 - INFLUENCED BY BODY COMPOSITION

FACTORS TO CONSIDER

- PHYSICAL ACTIVITY MAKES A DIFFERENCE
- ONE LB OF FAT = 3,500 CAL'S EXTRA
- LOSE 1 POUND OF FAT = <3,500 CAL'S
- STRENGTH EXERCISE IMPROVES MUSCLE TONE
 - INCREASES METABOLISM AND THEREFORE ABILITY OF BODY TO BURN FAT
- A CUMULATIVE EFFECT!

EXERCISE & WEIGHT LOSS

- RESTING METABOLIC RATE
 - 90% OF CALORIES BURNED
- EXERCISE METABOLIC RATE (EMR)
 - 10% OF CALORIES BURNED
 - INCREASE EMR - INFLUENCE WEIGHT LOSS!
 - BIGGER CONTRIBUTION TO BMR BY USING LARGE MUSCLE ACTIVITY

CHANGING TRIGGERS AND SUBSTITUTE ACTIVITIES

- TURN OFF DISTRACTIONS
- REPLACE SNACK BREAKS W. EXERCISE
- EAT SLOWLY
- DO NOT EAT UNTIL HUNGRY
- SMALLER PORTIONS - PLATES
- MAKE "GOOD FOOD CHOICES" EASIER
- EAT ONLY IN THE KITCHEN

MORE SUGGESTIONS

- DRINK WATER BEFORE EATING
- GO "OUT" FOR DESSERTS
- DO NOT SKIP MEALS!
- NO SERVING DISHES ON THE TABLE
- CUT BACK ON GRAVIES, SAUCES, ETC
- ENTRÉE PREPARATION
 - BROILED, STEAMED, BAKED, GRILLED, POACHED, OR ROASTED
- FRESH FRUIT & VEGETABLES!

NUTRITION PLAN FOR WEIGHT LOSS

- MODERATE GOALS (1-2 LB. PER WEEK)
- HEALTHY REWARDS
- GO BACK TO YOUR PLAN
- REPUTABLE SOURCES
 - REGISTERED DIETITIANS, PROFESSIONALS
- AVOID QUICK LOSS PROGRAMS
- SOUND DIETARY GUIDELINES

EATING DISORDERS

& ANOREXIA NERVOSA

- & 1/100 FEMALES BETWEEN 12 AND 18
- & DRASTIC WEIGHT LOSE
 - 10-25% BELOW IDEAL WEIGHT
- & MIDDLE CLASS HOME
- & POOR SELF IMAGE
- & DESIRE TO PLEASE - PERFECTION
- & LACK OF ATTENTION - MOODS
- & PREOCCUPIED W FOOD & WEIGHT
- & BAGGY CLOTHING
- & EXCESSIVE EXERCISE

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BULIMIA

- APPROX. 25% OF COLLEGE WOMEN
- CYCLE OF DIETING, BINGEING, PURGING
- SIMILAR BACKGROUNDS AS ANOREXICS
- 30-50% OF ANOREXICS ARE BULIMIC
- MAY BE LIFE-THREATENING
- LARGE WEIGHT GAINS & LOSSES
- BATHROOM VISITS AFTER MEALS
- DEPRESSION
- EATING OUT OF CONTROL

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TREATING EATING DISORDERS

- ↑ HOSPITALIZATION IF UNDER 10% OF IDEAL BODY WEIGHT
- ↑ MEDICATION FOR ANXIETY OR DEPRESSION
- ↑ INDIVIDUAL PSYCHOTHERAPY
- ↑ GROUP THERAPY
- ↑ FAMILY THERAPY
- ↑ SUPPORT GROUPS

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OTHER FACTORS

- EMOTIONAL PROBLEMS
- FOOD AS REWARD... FOCAL POINT
- MENUS/CHOICES
- IGNORE INTERNAL CUES OF HUNGER AND "USE THE CLOCK" TO EAT.
- NOT AWARE OF CALORIC INTAKE
- LESS ACTIVE THAN THEY THINK

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IMPROVE YOUR NUTRITIONAL INTAKE

- ACCURATE INFORMATION
- SELF-KNOWLEDGE ABOUT EATING PATTERNS
- SET RATIONAL GOALS
- SOCIAL AND COMMUNITY SUPPORTS

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TRIGGERS TO EATING

- | | |
|------------------------|-------------------|
| ■ TIME OF DAY | ■ INATTENTION |
| ■ MOOD | ■ HABIT |
| ■ BOREDOM | ■ HUNGER? |
| ■ STRESS/ANXIETY | ■ APPETITE? |
| ■ HORMONAL CHANGES | ■ LOW SELF ESTEEM |
| ■ PEER/FAMILY PRESSURE | ■ ENVIRONMENT |
| | ■ SIGHT/SMELL |

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STOPPING THE EAT RESPONSE

- ACT RESPONSIBLY
- STRESS MANAGEMENT
- BREAK THE HABIT
- REMAIN ACTIVE
- ANALYZE EMOTIONAL PROBLEMS
- MAKE EFFORT
- HUNGER OR APPETITE?
- AVOID ENVIRONMENTAL TRIGGERS
- SELECT ALTERNATIVES
- PLAN FOR PROBLEM SITUATIONS

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WEIGHT CONTROL

- TECHNIQUES FOR ASSESSING
- HEREDITY VS. ENVIRONMENT
- FOOD INTAKE & METABOLISM
 - BROWN FAT, SATIETY, HUNGER, APPETITE, HYPERPLASIA, SET POINT
- TRIGGERS TO EAT & CHANGING
- HIDDEN MESSAGES

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